HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, Colorado 80527-2400

PATENT APPLICATION

ATTORNEY DOCKET NO. 1003568-1

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Vance Stephens

Confirmation No.: 8982

Application No.: 09/870,878

Examiner: Schlack, S.

Filing Date: 5/30/2001

Group Art Unit: 2625

Title: TECHNIQUES FOR ALIGNING IMAGES USING PAGE CHARACTERISTICS AND IMAGE SHIFTING

Adjustment date: 03/23/2007 MAULDIN1
03/21/2007 TBESHAH1 00000022 09773054
01 FC:1251 -120.00 OP

Mail Stop Appeal Brief-Patents
Commissioner For Patents
PO Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on 12/4/2006, and decision on pre-appeal brief request for review mailed January 18, 2007.

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) $500.00.

(complete (a) or (b) as applicable)

03/23/2007 MAULDIN1 00000001 082025 09870878
01 FC:1251 120.00 OP

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

☒ (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:

☒ 1st Month $120	☐ 2nd Month $450	☐ 3rd Month $1020	☐ 4th Month $1590

☒ A check in the amount of $120.00 is enclosed in payment of the time extension fee.

☐ (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account 08-2025 the sum of $ 500 . At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.

☒ A duplicate copy of this transmittal letter is enclosed.

☒ I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313-1450

Date of Deposit: 3/19/2007

OR

☐ I hereby certify that this paper is being transmitted to the Patent and Trademark Office facsimile number (571)273-8300.

Date of facsimile:

Typed Name: Larry K. Roberts

Signature: Larry K. Roberts

Respectfully submitted,

Vance Stephens

By Larry K. Roberts

03/21/2007 TBESHAH1 00000022 082025 09773054
01 FC:1251 120.00 OP

Larry K. Roberts

Attorney/Agent for Applicant(s)

Reg No.: 28,464

Date: 3/19/2007

Telephone: (949) 250-6008

Rev 10/06a (AptBrief)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:
Vance Stephens
Serial No. 09/870,878
Filed: 05/30/2001
For: TECHNIQUES FOR ALIGNING IMAGES USING PAGE CHARACTERISTICS AND IMAGE SHIFTING

Art Unit: 2625
Examiner: Schlack, S.

03/23/2007 MDOLDGE1 00000031 082025 09870878
02 FC:1402 500.00 DA

APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This appeal is taken from the Office's rejection of Claims 1-4, 6-14, and 16-21 mailed August 4, 2006 in the subject application.

A decision on appellant's pre-appeal brief request for review was mailed January 18, 2007, resetting the time to file an appeal brief for one month from the mailing date. A one month request for time extension is filed herewith, extending the time to file this brief until March 19, 2007.

03/21/2007 TBESHAH1 00000022 082025 09773054
02 FC:1402 500.00 DA

03/21/2007 TBESHAH1 00000022 082025 09773054
02 FC:1402 500.00 CR

I. REAL PARTY IN INTEREST.

The real party in interest is the assignee, Hewlett-Packard Development Company, L.P.

II. RELATED APPEALS AND INTERFERENCES.

There are no related appeals, interferences or judicial proceedings known to appellant, the appellant's legal representative, or assignee.

III. STATUS OF ALL THE CLAIMS.

Claims 1-20 were filed with this application. During the course of prosecution before the Primary Examiner, Claim 21 was added, Claims 1, 3, 4, 6, 9, 11, 13, 14, 16 and 19 were amended, and Claims 5 and 15 were canceled. Claims 1-4, 6-14 and 16-21 in their present form appear in Appendix 1.

Claims 1-4, 6-14 and 16-21 have been rejected, and are at issue in this appeal.

IV. STATUS OF AMENDMENTS

A paper filed October 3, 2006 included an amendment to Claim 9. The advisory action mailed October 26, 2006 stated that the amendment was entered. The appendix of claims attached hereto reflects Claim 9 in the amended form.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER.

The page and line numbers referred to herein are to the specification; reference characters are found in the drawing.

The subject matter of the claims at issue on this appeal are directed to addressing problems in printing images on media having characteristics which vary from the nominal. These characteristics can include a print medium which is shorter or longer than the nominal length dimension. [5:25 to 6:6; FIGS. 5A-5C]

Claim 1 is drawn to a method for printing an image on a print medium [10; FIG. 1], comprising:

positioning the print medium at a print zone [11:19-27; 30, FIG. 1 and 202, FIG. 7];

determining actual medium size and medium placement characteristics [11:23-27, 12:15-21; 204, 222, FIG. 7] said actual medium size characteristics including an actual medium length along a media feed path [12:9-14; 218, FIG. 7];

using the size and placement characteristics, shifting an image to be printed relative to nominal size and medium placement characteristics [12:21-28; 224; FIG. 7]; and

printing the shifted image on the medium [12:21-28; 226; FIG. 7].

Claim 11 is drawn to a method for duplex printing an image on a print medium, comprising:

positioning a front side of the print medium at a print zone [11:19-22; 202, FIG. 7];

determining actual size and placement characteristics of the medium, said actual medium size characteristics including an actual medium length along a media feed path [11:23 to 12:14; 204-218, FIG. 7];

printing a front side image on said front side [11:32 to 12:9; 214-216, FIG. 7];

passing the print medium through a duplexing path to flip the print medium and present the back side of the print medium at the print zone for printing a back side image [12:15-19; 220 FIG. 7];

measuring leading edge and absolute location characteristics of the flipped print medium [12:19-21; 222, FIG. 7];

calculate shift parameters to shift the back side image to align with the front side image placement [12:21-24; 224, FIG. 7];

print a shifted back side image [12:24-28; 226, FIG. 7].

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL.

The grounds of rejection to be reviewed on appeal are:

(I) whether Claims 1-4, 6 and 9-10 are unpatentable under 35 USC 103(a) over Ohsumi et al. (Ohsumi, US 6,052,552) in view of Kato (US 6,799,761);

(ii) whether Claims 7 and 8 are unpatentable under 35 USC 103(a) over Ohsumi in view of Kato and Mizubata et al. (Mizubata, US 6,888,650);

(iii) whether Claims 11-14, 16, 19 and 20-21 are unpatentable under 35 USC 103(a) over Ohsumi in view of Kato and Wibbels et al. (Wibbels, US 6,118,950); and

(iv) whether Claims 17-18 are unpatentable under 35 USC 103(a) over Ohsumi in view of Kato, Wibbels and Mizubata.

VII. ARGUMENT.

For purposes of this appeal, appellant is content to stand on the differences between the claimed invention and the applied references discussed below, because these differences are sufficient to establish that a prima facie case of anticipation, because obviousness has not been established, and because the applied references do not describe, teach or suggest appellants' invention. Appellant does not concede, however, that other differences do not exist.

A. The Requirements of 35 USC §103.

35 USC §103 requires that the invention as a whole must be considered in obviousness determinations. The invention as a whole embraces the structure, its properties and the problem it solves. In re Wright, 6 USPQ2d 1959, 1961 (Fed.Cir. 1988).

In order to provide a basis for obviousness, the applied references must be related to the subject matter of the invention in issue and must suggest (expressly or by implication) the combination of the invention in issue. In re Sernaker, 702 F.2d 989 (Fed.Cir. 1983).

Further, the combined teachings of the prior art references should suggest the advantage of combining the teachings. In re Sernaker, supra, at 995-996.

In determining the combined teachings of the applied references, the subject matter of the claimed invention must not be utilized to provide hindsight reconstruction of the applied references. As stated by the Court of Customs and Patent Appeals In re Shuman, 361 F.2d 1008 (CCPA 1966):

> It is impermissible to first ascertain factually what appellant did and then view the prior art in such a manner as to select from the random facts of that art only those which may be modified and then utilized to reconstruct appellants' invention from such prior art. 361 F.2d at 1012.

The Examiner bears the burden of establishing a prima facie case of obviousness based on the prior art. "... 'This burden can be satisfied only by showing some objective teaching in the prior art or that knowledge generally

available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.' The patent applicant may then attack the Examiner's prima facie determination as improperly made out, or the applicant may present objective evidence tending to support a conclusion of nonobviousness." In re Fritch, 23 USPQ 1780, 1783 (Fed.Cir. 1992).

Appellants submit that the Primary Examiner has not established prima facie that the claimed invention would have been obvious in view of the applied references, and that the references do not teach or suggest the claimed invention.

B. A Prima Facie Case of Obviousness Has Not Been Established.

Rejection of Claims 1-4, 6 and 9-10: 35 USC 103(a)

Claims 1-4, 6 and 9-10 are rejected as being unpatentable under 35 USC 103(a) over Ohsumi in view of Kato.

Ohsumi is directed to an image forming apparatus with skew correction. The apparatus forms an image on a recording material. The position of the recording material is detected when the recording material is underway from a registration roller for correcting a skew of the material to an image forming position, and the image is written based on the detected position signal, so that the image is formed at a proper position on the recording material (Abstract).

Kato is directed to a sheet-position detection device and image forming apparatus including the device. The detection device has a stop unit for temporarily stopping a sheet conveyed along a sheet conveying path, and a sheet-position detector for detecting a position of the sheet in a direction transverse to a conveying direction of the sheet during the stop of the sheet. The stop unit includes a pair of rotating members for rotating in order to convey the sheet while grasping the sheet, and a sheet-position detector detects an edge of the sheet parallel to the sheet conveying direction. (Abstract)

Claim 1:

Claim 1 is drawn to a method for printing an image on a print medium, including:

[A] positioning the print medium at a print zone;

[B] determining actual medium size and medium placement characteristics, said actual medium size characteristics including an actual medium length along a media feed path;

[C] using the size and placement characteristics, shifting an image to be printed relative to nominal size and medium placement characteristics; and

[D] printing the shifted image on the medium.

Here the letter designations A-D have been added for convenience in reference.

Ohsumi does not describe at least elements B and C of this claim. Ohsumi does not describe teach or suggest that an actual medium length along a media feed path be determined, and that the determined media size and placement characteristics be used in shifting an image to be printed relative to nominal size and medium placement characteristics.

The Examiner states at page 6, first paragraph of the final rejection, that Ohsumi does not disclose "said actual medium size characteristics including an actual medium length along a media feed path. The Examiner asserts that Kato discloses at column 5, lines 61-67 and column 6, lines 1-12, that information related to the length of the sheet is detected. According to the final rejection, it allegedly would have been obvious to include length characteristics of the medium, and that the motivation for doing so would have been to control the roller advance in the printer for proper placement of the image. The final rejection further asserts that it therefore would have been obvious to combine to Ohsumi and Kato to obtain the invention specified in Claim 1.

Appellant respectfully disagrees with these assertions.

Without conceding that Kato is prior art with respect to the claimed subject matter of this application, applicant respectfully disagrees with this recitation of teachings of Kato. The cited passage of Kato does not describe that information relating to the length of the sheet is detected, but rather that:

> "When the sheet detection means 27a or 27b detects the leading edge of the sheet S, it outputs a detection signal to a CPU (central processing unit, not shown) provided in the apparatus main body 51. The CPU determines the timing of the stop or the reversal of the large-diameter roller 25 according to the detection signal from the sheet detection means 27a or 27b and information relating to the length of the sheet in the conveying direction input from an operation unit (not shown)...."

This passage from Kato states that information relating to the length of the sheet is input from an operation unit, and does not describe that an actual length of the sheet is determined. The length information provided thus apparently relates to the nominal length of the sheet, not its actual length. Since this information is used to stop rotation of rollers, and re-direct the sheet to a sheet reversal or duplex path, more exact length data is not needed in this application.

Because Ohsumi does not teach or suggest each of the features of the method of Claim 1, and because Kato fails to supply teachings missing from Ohsumi, the applied references cannot render the subject matter of Claim 1 unpatentable under Section 103. To establish prima facie obviousness, all claim limitations must be taught or suggested by the prior art. MPEP 2143.03; In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Turning now to the Examiner's holdings set out in paragraph 4 of the final rejection, the Examiner asserts that:

> ...examiner Rahimi correctly asserts that Kato discloses that information relating to the length of the sheet is detected in col 5, lines 61-67 and col 6, lines 1-12. Kato discloses, "The CPU determines the timing of the stop or the reversal of the large-diameter roller 25 according to the detection signal from the sheet detection means 27a or 27b and information relating to the

length of the sheet in the conveying directions input from an operation unit (not shown)." The examiner interprets this to be equivalent to determining medium size pertaining to the actual medium length of the sheet along the media feed path (seen in Fig 2 of Kato). The examiner further interprets the CPU to determine the actual length of the medium by means of the user input. For example, if the user, supplying the user input to the CPU, determines the actual length to be 11 inches (along the direction of the media feed path) in a 8.5x11 inch piece of printing paper or medium, the CPU then determines the actual length from the user input. Therefore, the examiner interprets the reference to correctly read on the claimed features.

The appellant respectfully submits that the foregoing discussion of Ohsumi in view of Kato clearly demonstrates why the references fail to teach or suggest the claimed subject matter. The Examiner has posited two alternative rationales as to how the combination allegedly describes the claimed subject matter. These are considered below.

Kato's sheet detection means 27a and 27b are used to detect the leading edge of the sheet S, and the CPU stops the large diameter roller 25 at a position before the trailing edge of the sheet reaches the duplex reversal unit UA or in duplex copying, before the trailing edge reaches the driven roller 26b. The CPU determines the stoppage of the roller 25 according to the leading edge detection signal and information relating to the length of the sheet in the conveying direction input from an operation unit. Thus, Kato clearly does not detect an actual length of the sheet in the conveying direction because he does not detect the trailing edge of the sheet after detecting the leading edge. Instead Kato relies on information "relating to the length" input from an operation unit. This inputted information can only be interpreted as a nominal length dimension, e.g., as the Examiner posits, an 11 inch length for letter size paper. Yet the actual dimension of the sheet may vary from the nominal dimension, as noted in applicant's specification, e.g. at 4:21-28. Kato does not address the problem associated with variation from the nominal dimension. Thus, the Examiner's assertion ("The examiner interprets this to be equivalent to determining medium size pertaining to the actual medium length of the sheet along the media feed path)" is without support in the applied references.

Now consider the second line of reasoning asserted by the Examiner ("The examiner further interprets the CPU to determine the actual length of the medium by means of the user input"). As pointed out above, however, at most the user input can only suggest entry of a nominal dimension, say 11 inches. This is not the actual length of the sheet, which may vary from the nominal dimension due to various reasons. For example, there are cutting tolerances and size variations based on moisture content (driven by relative humidity) that impact the actual size of the medium.

Thus, the combination of Ohsumi and Kato does not teach or suggest the claimed subject matter. The rejection of Claim 1 as well as all claims depending therefrom should be reversed.

Claim 2:

Claim 2 depends from Claim 1, and recites that " the image extends from lateral edge to lateral edge of the medium."

The final rejection addresses the subject matter of this claim by asserting that "Ohsumi in view of Kato disclose the method of claim 1, wherein the image extends from lateral edge to lateral edge of the medium (col 4, lines 59-67). Ohsumi discloses that margins are determined by timing of image forming by the laser on the photoconductor. Such timing can be conceivably adjusted to leave a margin of zero or no margin (col 4, lines 59-67)"

The mere fact that a reference may be modified, or allegedly can "conceivably" be modified, is insufficient to present a prima facie case of obviousness. MPEP 2143.01(III) ("The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.") Here there is no suggestion in Ohsumi to set the margins to zero, and so prima facie obviousness of the subject matter of Claim 2 has not been established.

Rejection of Claims 7-8: 35 USC 103(a)

Claims 7-8 have been rejected as being unpatentable over Ohsumi in view of Kato and Mizubata. This rejection is respectfully traversed, for the reasons given above regarding Claim 1.

Claim 7:

Claim 7 depends from Claim 1, and further recites that "said shifting said image includes digitally shifting the image in a direction aligned with or transverse to a medium advance axis."

At page 7, paragraph 18 of the final rejection, the Examiner states that Ohsumi in view of Kato do not disclose, "wherein said shifting said image includes digitally shifting the image in a direction aligned with or transverse to a medium advance axis." The Examiner further asserts that Mizubata discloses this limitation in column 7, lines 36-42. According to the final rejection, Ohsumi, Kato and Mizubata are analogous art, because they are from the same field of endeavor, namely image forming devices. Appellant respectfully disagrees.

Mizubata is not directed to a method for printing an image on a print medium, as in Claim 1, but rather to a document reading apparatus and method. Thus, Appellant respectfully submits that teachings from Mizubata are not properly combinable with teachings from Ohsumi as asserted by the Examiner.

The final rejection further asserts that it would have been obvious to combine Ohsumi with Kato and with Mizubata's method of digitally shifting an image including digitally shifting the image in a direction aligned with or transverse to a medium advance axis, with the motivation for doing so to correct for misalignment of the image.

The rejection of Claim 7 should be reversed, for reasons discussed above regarding Claim 1, and because the rejection is the product of improper hindsight reconstruction. Mizubata is not in the same field of endeavor as the claimed

subject matter, and the rejection makes use of teachings found only in appellant's specification to make the combination asserted by the Examiner.

Claim 8:

Claim 8 depends from Claim 1, and further recites that" said shifting said image includes digitally rotating the image." This rejection should be reversed, for reasons similar to those discussed above regarding Claim 7.

Rejection of Claims 11-14, 16, 19 and 20-21: 35 USC 103(a)

Claims 11-14, 16, 19 and 20-21 stand rejected as being unpatentable over Ohsumi in view of Wibbels et al. ("Wibbels"). This rejection is respectfully traversed on the grounds that a prima facie case of obviousness has not been established, and the applied references do not teach or suggest the claimed subject matter.

Claim 11:

Claim 11 recites a method for duplex printing an image on a print medium, comprising:

positioning a front side of the print medium at a print zone;

determining actual size and placement characteristics of the medium, said actual medium size characteristics including an actual medium length along a media feed path;

printing a front side image on said front side;

passing the print medium through a duplexing path to flip the print medium and present the back side of the print medium at the print zone for printing a back side image;

measuring leading edge and absolute location characteristics of the flipped print medium;

calculate shift parameters to shift the back side image to align with the front side image placement;

print a shifted back side image.

At paragraph 21, page 8 of the final rejection, the Examiner alleges that "Ohsumi in view of Kato disclose a method for duplex printing an image on a print medium, comprising: positioning a front side of the print medium at a print zone (col 3, lines 33-35); determining actual size and/or placement characteristic of the medium (col 3, lines 33-35); said actual medium size characteristics including an actual medium length along a media feed path (Kato: col 5, lines 61-67 and col 6, lines 1-12); printing a front side image on said front side (col 3, lines 66-67 and col 4, lines 1-10); measuring leading edge and absolute location characteristics of the flipped medium (col 3, lines 33-35, after paper is turned over similar position detection is employed)."

Kato does not describe determining an actual length characteristic, as described above regarding Claim 1. Rather, Kato suggests entering a nominal length dimension. For this reason alone, all limitations of Claim 11 are not taught or suggestion by the applied references, and the rejection should be reversed.

The Examiner states that "although Ohsumi discloses in column 5, lines 1-15 the importance of aligning front and back images, he does not explain the method of alignment by calculating shift parameters to shift the back side image to align with the front side image placement and print a shifted back side image." The Examiner asserts that "Wibbels discloses these limitations in column 5, lines 12-30 by shifting the front and back images for alignment of images." The Examiner further alleges that it would have been obvious to "shift the back side image to align with the front side image placement and print a shifted back side image" and that "the suggestion/motivation for doing so would have been to avoid subsequent cutting of copy sheet causing cutting away the images (Ohsumi- column 5, lines 9-15)." Applicant respectfully disagrees with this line of reasoning.

Here, the Examiner has made only broad, conclusory statements regarding the teachings of the references. Yet there is no description as to how the references provide the alleged suggestion/motivation, or indeed how the alleged suggestion would lead one to the claimed subject matter.

Wibbel describes a duplex image alignment process, wherein a test sheet having indicia on each side of the sheet is imaged by a printer or copier. The process is described at 4:17:

> In a preferred embodiment, sheet media 100 is a conventional, non-opaque media that enables a visual detection of an image formed on a back side of the sheet when the sheet is viewed from the front side, such as when the sheet is held up to a light source. Also in a preferred embodiment, the indicia printed on each side of sheet 100 includes portions of a vernier scale having adjustment indicators indicative of incremental adjustments to be made to printer 10 for aligning images on a duplexed sheet. The vernier scale imaged on the front side is visually inspected by a user relative to the portion of the scale imaged on the back side that is seen through the sheet. Based on the repeatable misalignment of the scales, selected adjustment indicators are manually entered into printer 10 via control panel 54 and firmware 56 to modify/correct duplex image alignment (registration) parameters of printer 10.

Thus, Wibbels does not describe a method as in Claim 11, including:

determining actual size and placement characteristics of the medium, said actual medium size characteristics including an actual medium length along a media feed path;

printing a front side image on said front side;

passing the print medium through a duplexing path to flip the print medium and present the back side of the print medium at the print zone for printing a back side image;

measuring leading edge and absolute location characteristics of the flipped print medium;

calculate shift parameters to shift the back side image to align with the front side image placement;

print a shifted back side image.

Wibbels describes a process for adjusting a printer or copier based on misalignment between already printed front and back side images, to improve alignment for subsequently processed duplex jobs. Even assuming, without

conceding that it is appropriate to do so, that Ohsumi is combined with Kato and Wibbels, the claimed subject matter still does not result. At most, the process described in Wibbels is applied according to this combination to make manual adjustments to address subsequent print jobs in the Ohsumi machine.

Appellant respectfully submits that Ohsumi, Kato and Wibbels do not teach or suggest the subject matter of Claim 11 as well as claims depending therefrom, and that the rejection should be reversed.

Claim 12:

Claim 12 depends from Claim 11, and recites "wherein the front and back side images extend from lateral edge to lateral edge of the medium."

A prima facie case of obviousness has not been established regarding Claim 12, for reasons similar to those discussed above regarding Claim 2.

Claim 21:

This claim depends from Claim 11, and recites that "said determining actual size and placement characteristics of the medium is performed without printing on said print medium."

The Examiner states at page 10 of the final rejection that "examiner interprets the determination of the medium size to pertain to the actual medium length of the sheet along the media feed path (seen in Fig 2 of Kato and disclosed in parent claim 11). The examiner notes this size is determined by input from the operation unit, which does not include printing on the print medium. Also, the placement characteristics of likewise derived by means other than printing on the print medium (Kato: col 5, lines 61-67 and co 6, lines 1-12)." However, this reference does not meet the claim language of "determining actual size and placement characteristics of the medium." As pointed out above in the discussion regarding Claim 1, Kato teaches inputting information "relating" to the length, i.e. nominal length, not the actual length characteristic. Because the combination of references does not meet all claim limitations, a prima facie case of obviousness has not been established.

Rejection of Claims 17-18: 35 USC 103(a)

Claims 17-18 stand rejected as being unpatentable over Ohsumi in view of Kato, Wibbels and Mizubata. Similar considerations apply to Claims 17-18 as were discussed above regarding Claims 7-8.

Claim 17:

Claim 17 depends from Claim 11, and recites "said shifting said back side image includes digitally shifting the image in a direction aligned with or transverse to a medium advance axis."

The rejection of Claim 17 should be reversed, for reasons discussed above regarding Claim 11, and because the rejection is the product of improper hindsight reconstruction. Mizubata is not in the same field of endeavor as the claimed subject matter, and the rejection makes use of teachings found only in appellant's specification to make the combination asserted by the Examiner.

Claim 18:

Claim 18 depends from Claim 11, and recites "said shifting said back side image includes digitally rotating the image." This rejection should be reversed, for reasons similar to those discussed above regarding Claim 17.

VII. SUMMARY

The rejections under 35 USC § 103 must be reversed. A prima facie case of obviousness has not been made, and the cited references do not teach or suggest the claimed invention.

Respectfully submitted,

Dated: 3.19.2007

Larry K Roberts
Registration No. 28,464

Law Offices of Larry K. Roberts, Inc.
P.O. Box 8569
Newport Beach, CA 92658-8569
Telephone (949) 250-6008
Facsimile (949) 250-6012

APPENDIX I

1. (Previously Presented) A method for printing an image on a print medium, comprising:

positioning the print medium at a print zone;

determining actual medium size and medium placement characteristics, said actual medium size characteristics including an actual medium length along a media feed path;

using the size and placement characteristics, shifting an image to be printed relative to nominal size and medium placement characteristics; and

printing the shifted image on the medium.

2. (Original) The method of Claim 1 wherein the image extends from lateral edge to lateral edge of the medium.

3. (Previously Presented) The method of Claim 1 wherein said actual medium size and placement characteristics include an absolute location of a point on a leading edge of the medium.

4. (Previously Presented) The method of Claim 1 wherein said actual medium size and placement characteristics include a skew characteristic of a leading edge of the medium.

5. (Cancelled)

6. (Previously Presented) The method of Claim 1 wherein said actual medium size and placement characteristics include a medium width characteristic.

7. (Original) The method of Claim 1 wherein said shifting said image includes digitally shifting the image in a direction aligned with or transverse to a medium advance axis.

8. (Original) The method of Claim 1 wherein said shifting said image includes digitally rotating the image.

9. (Previously Presented) The method of Claim 1 wherein said shifting said image includes shifting the position of the print medium along said media feed path.

10. (Original) The method of Claim 1 wherein an area of the image is smaller than an area of the medium, so that margins are provided on the medium after said printing.

11. (Previously Presented) A method for duplex printing an image on a print medium, comprising:

positioning a front side of the print medium at a print zone;

determining actual size and placement characteristics of the medium, said actual medium size characteristics including an actual medium length along a media feed path;

printing a front side image on said front side;

passing the print medium through a duplexing path to flip the print medium and present the back side of the print medium at the print zone for printing a back side image;

measuring leading edge and absolute location characteristics of the flipped print medium;

calculate shift parameters to shift the back side image to align with the front side image placement;

print a shifted back side image.

12. (Original) The method of Claim 11 wherein the front and back side images extend from lateral edge to lateral edge of the medium.

13. (Previously Presented) The method of Claim 11 wherein said actual medium size and placement characteristics include an absolute location of a point on a leading edge of the medium.

14. (Previously Presented) The method of Claim 11 wherein said actual medium size and placement characteristics include a skew characteristic of a leading edge of the medium.

15. (Cancelled)

16. (Previously Presented) The method of Claim 11 wherein said actual medium size and placement characteristics include a medium width characteristic.

17. (Original) The method of Claim 11 wherein said shifting said back side image includes digitally shifting the image in a direction aligned with or transverse to a medium advance axis.

18. (Original) The method of Claim 11 wherein said shifting said back side image includes digitally rotating the image.

19. (Previously Presented) The method of Claim 11 wherein said shifting said back side image includes shifting the position of the print medium along said media feed path.

20. (Original) The method of Claim 11 wherein an area of the front side image is smaller than an area of the medium, and an area of the back side image is smaller than said area, so that margins are provided on the medium after said printing of said front side image and said back side image.

21. (Previously Presented) The method of Claim 11, wherein said determining actual size and placement characteristics of the medium is performed without printing on said print medium.

EVIDENCE APPENDIX

No evidence submitted pursuant to 37 CFR Sections 1.130, 1.131 or 1.132, or any other evidence entered by the Examiner, is relied upon by appellant in this appeal.

RELATED PROCEEDINGS APPENDIX

There are no related proceedings and thus no decisions rendered in any such proceeding.